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09/966,678	09/28/2001	John R. Fredlund	82616SLP	5488

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EXAMINER

SCHUBERT, KEVIN R

ART UNIT	PAPER NUMBER
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2137

DATE MAILED: 05/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/966,678	FREDLUND ET AL.	
	Examiner	Art Unit	
	Kevin Schubert	2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7, 12-15, 21-32, 35-38 and 40-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 12-15, 21-32, 35-38 and 40-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Claims 1-7,12-15,21-32,35-38, and 40-43 have been considered.

Continued Examination Under 37 CFR 1.114

5 A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/9/05 has been entered.

10

Election/Restrictions

Claims 8-11,16-20,33-34, and 39 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 3/9/06.

15

Allowable Subject Matter

The subject matter of claim 22 appears to be allowable, if the 112 issues are resolved and the claim is rewritten in independent form, including all the limitations of the base claim and any intervening claims. Examiner notes that the claim stands rejected under 35 U.S.C. 112.

20

Specification

The Specification is objected to in accordance with the 112, first paragraph, rejections below.

Claim Objections

25 Claim 30 is objected to because of the following informalities: "transmitting the authentication signature without image content **from the digital still image**" appears to be problematic. Appropriate correction is required.

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Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

5 Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 37 is rejected under 35 U.S.C. 101 as being directed to non-statutory subjective matter.

10 Specifically, non-functional language appears to be claimed.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

15 The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

20 Claims 1-7, 12-15, 21-32, 35-38, and 40-43 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Examiner does not find the step of "applying the one of signature data to the captured digital still image within the image capture device to
25 produce an authentication signature *without image content*" (see claim 1) to be enabled. While Examiner certainly finds applying the one of signature data to the captured digital still image within the image capture device to produce an authentication signature enabled, Examiner fails to see how a signature is without image content.

30 It is known in the art to create a signature by manipulating image content (e.g. hash algorithm) such that at least part of the image content itself is incorporated in the signature. Examiner, however, is unaware of a process by which a signature of image content is generated, which is entirely devoid of image content. Further, Examiner finds no disclosure in the Specification enabling such a process.

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Examiner also notes that claim 12, for example, recites that both the verification signature and the authentication signature are without image content. Appropriate correction or a specific reference to the Specification disclosing how such a process is enabled is required.

5 Claims 1-7,12-15,21-32,35-38, and 40-43 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Examiner finds Applicant's disclosure of producing an a signature "without image content" to be new
10 matter (see previous paragraph). Appropriate correction or a specific reference as to where such a limitation is disclosed in the Specification is required.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

15 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

 Claims 1-7,12-15,21-32,35-38, and 40-43 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant
20 regards as the invention. The limitation "storing the signature data" (see claim 1, line 15) is indefinite. Specifically, it is unclear whether "the signature data" refers to the "one of signature data" or the "plurality of different signature data" (see claim 1, lines 4-5). In other words, it is unclear whether one of signature data is stored at the remote location or all of the plurality of different signature data is stored at the remote location. Appropriate correction is required.

25 Claims 12-15,21-26, and 35-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The limitation "applying the signature data to the digital still image to be authenticated at

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the authentication location" (see claim 12, lines 17-18) is indefinite. Specifically, it is unclear whether the digital still image is actually authenticated at the authentication location. Based on one interpretation of the claims, the applying the signature data is accomplished at the authentication location on a digital still image to be authenticated elsewhere. Appropriate correction is required.

5

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- 10 (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 15

Claims 1,5,7,21,23-31,35-38, and 40-41 are rejected under 35 U.S.C. 102(e) as being anticipated by Kaplan, U.S. Patent Application Publication No. 2002/0023220.

20

As per claims 1,21,27,30,35, and 40-41, the applicant describes a method comprising the following limitations which are met by Kaplan:

- a) transmitting one of signature data from a plurality of different signature data from a remote location to the digital image capture device ([0072]);
- 25 b) associating an image identification with the captured digital still image ([0086]-[0089]);
- c) applying the one of signature data to the captured digital still image within the image capture device to produce an authentication signature without image content representative of the captured digital still image ([0086]-[0089]);
- 30 d) associating the authentication signature with the image identification ([0086]-[0089]);
- e) transmitting the authentication signature to the remote location ([0086]-[0089]);

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f) storing the signature data, authentication signature, and image identification at the remote location; wherein said captured digital still image is not transmitted to or stored at said remote location ([0086]-[0089]).

5 As per claims 5,7,23,25,28-29,31, and 36-38, the applicant describes the method of claim 1 (etc), which is met by Kaplan, with the following limitation which is also met by Kaplan:

Wherein the remote location comprises a database for storing the authentication signature ([0086]-[0089]).

10 Claims 12-13 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Cromer, U.S. Patent Application Publication No. 2002/0083323.

As per claims 12-13 and 15, the applicant describes a method comprising the following steps which are met by Cromer:

- 15 a) transmitting an authentication request for the digital still image ([0024] and [0026]);
- b) determining the image identification for the digital still image ([0019]);
- c) determining, from the remote location, the signature data and the authentication signature without image content associated with the image identification ([0024] and [0026]);
- d) transmitting the signature data from the remote location to an authentication location remote
- 20 from the remote location ([0019] and [0026]);
- e) applying the signature data to the digital still image to be authenticated at the authentication location to produce a verification signature without image content ([0021]);
- f) transmitting the verification signature without image content from the authentication location to the remote location ([0024]);
- 25 g) comparing the authentication signature without image data and the verification signature without image content to determine the authentication of the digital still image ([0024]).

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-4 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaplan.

As per claims 2-3 and 24, the applicant describes the method of claims 1 and 21, which are met by Kaplan, with the following limitation:

Further comprising the step of capturing the digital still image after the signature data is transmitted to the digital image capture device from the remote location;

Kaplan discloses all the limitations of claims 1 and 21. However, Kaplan appears to be silent as to when the signature data is transmitted. Examiner takes official notice as to sending signature data before data is created. It would have been obvious to one of ordinary skill in the art at the time the invention was filed to send signature data before capturing a digital still image because doing so allows a signature to be produced when an image is captured.

As per claim 4, the applicant describes the method of claim 1, which is met by Kaplan, with the following limitation:

Wherein the signature data from the remote location is transmitted to the digital image capture device subsequent to the capture of the digital still image;

Kaplan discloses all the limitations of claims 1 and 21. However, Kaplan appears to be silent as to when the signature data is transmitted. Examiner takes official notice as to sending signature data after data is created. It would have been obvious to one of ordinary skill in the art at the time the invention was filed to send signature data after capturing a digital still image in a situation in which

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signature data is not permanently stored or in a situation in which fresh signature data is utilized to produce a signature when an image is captured.

Claims 6 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaplan in view
5 of Lambert, U.S. Patent Application Publication No. 2001/0007128.

As per claims 6 and 26, the applicant describes the method of claims 1 and 21, which are met by Kaplan, with the following limitation:

Further comprising the step of transmitting a message indicative of receipt of the authentication
10 signature by the remote location (Lambert: [0039]);

Kaplan describes all the limitations of claims 1 and 21. However, Kaplan fails to describes the step of transmitting a receipt message from the remote location when the authentication signature has been received by the remote location.

Lambert describes a secure communication method in which one system sends a second system
15 a receipt message when it has received data from the second system (Lambert: [0039]). It would have been obvious to one of ordinary skill in the art at the time the invention was filed to incorporate the ideas of Lambert with those of Kaplan and add the use of transmitting a receipt message once data has been received so that a sending system can be sure that the receiving system has received the data for the purpose of security and for the purpose of knowing that the sending system doesn't have to resend data.

20

Claims 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cromer in view of Schneier (Schneier, Bruce. Applied Cryptography. 1996. John Wiley & Sons, Inc. page 56).

As per claim 14, the applicant describes the method of claim 13, which is met by Cromer, with the
25 following limitation:

Further comprising the step of transmitting an authentication code to verify the authentication of the authentication message (Schneier: page 56);

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Cromer discloses all the limitations of claim 13. However, Cromer fails to disclose the limitation of an authentication code verifying authentication of a message. Schneier discloses that encryption allows an authentication message to be authenticated by the receiver. It would have been obvious to one of ordinary skill in the art at the time the invention was filed to combine the ideas of Schneier with those of Cromer and incorporate the use of encryption to authenticate the sender of an authentication message.

Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kaplan in view of Schneier.

As per claim 32, the applicant describes the method of claim 30, which is met by Kaplan, with limitations similar to that of claim 14. Examiner notes that the same motivation has been relied on (see rejection of claim 14).

Claims 42-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaplan in view of Menezes (Menezes, Alfred. Handbook of Applied Cryptography. CRC Press. 1997. pages 399-400).

As per claims 42-43, the applicant describes the following method which is met by Kaplan in view of Menezes:

- a) at a first time, transmitting one of signature data from a plurality of different signature data from a remote location to the digital image capture device (Kaplan: [0072]);
- b) associating an image identification with the captured digital still image (Kaplan: [0086]-[0089]);
- c) applying the signature data to the captured digital still image to produce an authentication signature without image content representative of the captured digital still image (Kaplan: [0086]-[0089]);
- d) associating the authentication signature with the image identification (Kaplan: [0086]-[0089]);
- e) at a second time different from the first time, transmitting the authentication signature to the remote location (Kaplan: [0086]-[0089]);

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f) storing the first time, second time, signature data, authentication signature, and image identification at the remote location; wherein said captured digital still image is not transmitted to or stored at said remote location (Menezes: 399-400; Kaplan: [0086]-[0089]);

Kaplan discloses a method which meets limitations of the above claim. However, Kaplan fails to disclose that a time is stored at the remote location. Menezes discloses the idea of time-stamping data wherein a time may be associated with data. It would have been obvious to one of ordinary skill in the art at the time the invention was filed to combine the ideas of Menezes with those of Kaplan because timestamps provide a number of benefits such as timeliness and uniqueness guarantees, message replay detection, time-limited access privilege implementation, etc.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Schubert whose telephone number is (571) 272-4239. The examiner can normally be reached on M-F 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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